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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,617	12/08/2003	Fang-Jwu Liao		4752

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EXAMINER	
VARGOT, MATHIEU D	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/731,617	LIAO, FANG-JWU	
	Examiner	Art Unit	
	Mathieu D. Vargot	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-15 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1.A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-15 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-15 of copending Application No. 10/707,361. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

2.The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: While claims 14 and 15 filed with the specification contain recitations to making an optical element in general, the specification is strictly limited to the forming of a light guide plate. Applicant should provide basis in the instant specification for claims 14 and 15.

3.Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, line 2, "the molten methacrylate" technically lacks antecedent basis.

4.The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 11, 12, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Azuma (see col. 2, lines 2-13; col. 9, lines 22-25).

Azuma discloses the instant method of molding a light guide plate/optical element by mixing molten methacrylate resin with an inert gas—carbon dioxide—and injecting the resin so mixed using a cylinder temperature of 230 deg C, which would be above the melting temperature of the resin. See example 1 at column 14, lines 34-37.

Concerning instant claims 14 and 15, it is submitted that these are inherent in the process. See the discussion of the prior art (col. 2, lines 2-13) concerning the reduction of viscosity when using an inert gas like carbon dioxide. In that the gas stays within the resin, the molded optical element would inherently have a smaller density.

5.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma.

Azuma is applied for reasons of record as set forth in paragraph 4, supra, the reference essentially lacking the aspects of the inert gas being one of the noble gases, that the

gas is heated, the exact viscosity of the molten resin and the material of the mold. it is submitted that these aspects are all well known in the art and would have been obvious modifications to the method of Azuma to facilitate formation of the light guide plate. The noble gases are conventionally used in place of carbon dioxide for plasticizing a resin and the exact gas employed would have been obvious dependent on price and availability. Surely heating the gas would be obvious to facilitate the mixing into the molten resin. The instant mold materials are quite conventional in the art and would have been obvious material selections for the mold of Azuma to enhance the rate of heat transfer between the mold and the resin injected thereinto. Azuma, in the discussion of the prior art, teaches that the gas lowers the viscosity of the resin and the exact value to which it is lowered would have been obvious dependent on initial viscosity and resin used.

> 6.(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11, 12, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaki et al (see col. 2, lines 43-48; col. 6, lines 36-50; the passage bridging columns 13 and 14).

Yamaki et al discloses the instant process for molding a light guide plate or optical disk/element (see passage bridging columns 13 and 14) by mixing an inert gas—carbon dioxide—into a methacrylate resin (example 3) employing a cylinder temperature of 240 deg C (see col. 9, line 50) and injecting the mixture into a mold. Yamaki et al clearly teaches that the incorporation of the gas reduces the viscosity of the resin during injecting. While the reference does teach that the gas eventually exudes from the resin,

the initially molded optical element product would have a smaller density that one molded without any inert gas.

7.Claims 2-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaki et al.

Yamaki et al essentially fails to explicitly teach the aspects found also lacking in Azuma in paragraph 5, supra. These claims are hereby rejected over Yamaki et al for the same reasons as listed in paragraph 5, supra.

8.Claims 1-15 are directed to the same invention as that of claims of commonly assigned 10/707,361. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

9.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni, can be reached on 571 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot
March 4, 2006

Mathieu D. Vargot
Primary Examiner
Art Unit 1732
3/4/06